

**University of Groningen**

## **Feigning sleep disorders – a call for research and clinical consideration**

Fuermaier, Anselm B.M.; Tucha, Lara; Becke, Miriam; Tucha, Oliver

*Published in:*  
Journal of Sleep Medicine and Disorders

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2014

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Fuermaier, A. B. M., Tucha, L., Becke, M., & Tucha, O. (2014). Feigning sleep disorders – a call for research and clinical consideration. *Journal of Sleep Medicine and Disorders*, 1(2), [1008].

**Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

**Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

## Short Communication

# Feigning Sleep Disorders – A Call for Research and Clinical Consideration

Anselm B.M. Fuermaier\*, Lara Tucha, Miriam Becke and Oliver Tucha

Department of Clinical and Developmental Neuropsychology, University of Groningen, The Netherlands

## Abstract

Benzodiazepines, one of the most commonly prescribed class of drugs for the pharmacological treatment of sleep disorders, are controversially discussed for their adverse effects such as physical dependence and withdrawal. Because of the effects of Benzodiazepines, feigning sleep disorders, also described as *malinger*, may be a viable mean for individuals to get access to prescription of benzodiazepines. Surprisingly, research on feigned sleep disorders is widely lacking. The present statement paper introduces the concept of *malinger*, demonstrates the inapprehensible shortness of research on feigned sleep disorders, suggests approaches for *malinger* detection, and calls for further research.

## \*Corresponding author

Anselm B.M. Fuermaier, Department of Clinical and Developmental Neuropsychology, University of Groningen, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands, Tel: 0031 50 363 9729; Fax: 0031 50 363 6304; E-mail: a.b.m.fuermaier@rug.nl

Submitted: 03 December 2014

Accepted: 20 December 2014

Published: 23 December 2014

## Copyright

© 2014 Fuermaier et al.

## OPEN ACCESS

## Keywords

- Sleep disorders
- Benzodiazepines
- Malingering
- Feigning

## INTRODUCTION

*Malingering* describes the intentional exaggeration or fabrication of symptoms with the goal of accessing an external incentive [1,2]. Malingering has traditionally been associated with cognitive dysfunctions after traumatic brain injury (TBI) [3] or post-traumatic stress disorder (PTSD) [4], where the prospect of sick leave or indemnity may serve as an effective incentive for individuals to malingering or grossly exaggerate symptoms. More recently, malingering of other conditions than TBI or PTSD has received growing attention. For example, over the last decade, malingering has also been reported in the context of attention deficit hyperactivity disorder (ADHD) and stimulated discussions on the honesty of patients presenting problems [5,6]. Those who feign ADHD are often motivated by access to prescriptions of stimulant medication or accommodations at school or work, such as extra time for examinations and assignments or an adjustment of workplace to reduce distractions [7]. Regardless of the condition which is feigned, most cases of malingering have in common that monetary compensation or unwarranted prescriptions of medication are frequently sought-after.

The incentive to get access to prescription medication may also make sleep disorders an intriguing target for malingering. Insomnia, for example, is a prevalent sleep disorder estimated to affect 15% of the population [8]. Insomnia is characterized by “dissatisfaction with sleep quality or quantity” (2) that might result from the inability to fall asleep or stay asleep. Patients often describe frequent awakenings during the night or early awakening in the morning. Daytime sleepiness, associated with

poor concentration, irritability, or anxiety, can ensue from the disturbed sleeping patterns. There are reasons suggesting that feigning symptoms of sleep disorders might be relatively easy to accomplish. For example, the lifetime prevalence of transient insomnia was estimated to be up to 80% [8], emphasizing the frequent occurrence and high familiarity of symptoms among the general public. Furthermore, the diagnostic process of insomnia largely depends on self-reports of individuals, making it relatively easy for individuals to untruthfully report the occurrence of such symptoms. Objective measures such as polysomnography (i.e. multi-parametric sleep examination using biophysical recordings) and multiple sleep latency tests (i.e. full-day test for excessive sleepiness) are often not used in routine clinical practice [9], which appears reasonable regarding the costly implementation of these methods.

Benzodiazepines are among the most commonly prescribed drugs for the pharmacological treatment of insomnia [8]. The sedative and anxiolytic properties of this class of medication [10] are primarily responsible for the beneficial effects for individuals suffering from sleep disturbances or anxiety. Their popularity remains despite their documented potential to be addictive [11]. For example, Busto and colleagues [12] reported that 1 to 3% of those prescribed with benzodiazepines take them for periods longer than recommended. Furthermore, nonmedical use has been noted as a principal problem [13]. Physical dependence and withdrawal symptoms are reasons why a considerable number of people may consider malingering as a viable option to get access to benzodiazepines. Even though it must be emphasized that the ability of benzodiazepines to produce experiences of euphoria

is limited, it was reported that people with a history of multiple substance use and abuse are at an increased risk of taking benzodiazepines in addition to other addictive substances [12].

In the light of prescription of benzodiazepines as a potential incentive for individuals to malingering sleep disorders, it appears surprising that research on feigned sleep disorders is widely lacking. One case-study [14] has been published reporting a man's attempt to malingering sleepwalking to escape litigation. The prescription of benzodiazepines as an incentive for feigning sleep disorders, however, has not been considered in research so far. Research on this issue is clearly needed as it has been pointed out [5] that there are vast consequences of undetected feigning and subsequent unjustifiable prescription and nonmedical use of medication. These consequences include, among others, substantial costs for the society (i.e. costs for assessment and treatments), unjustified occupation of limited medical resources (e.g. time and facilities of health care specialists), damage of public's confidence in the effectiveness of therapies, passive support of potential drug-trafficking and drug abuse as well as potential negative side effects of benzodiazepines for individuals when used non medically (e.g. dizziness, unsteadiness, feelings of depression).

Thus, clinicians are advised to pay increased attention on determining the validity of patients' reports, in particular by the presence of external incentives for a diagnosis of a sleep disorder. The development and application of approaches and measures for the detection of feigned symptoms might therefore be very helpful to support clinicians in distinguishing between feigning and honest responding. Research on malingered cognitive dysfunctions, such as following TBI, has examined the usefulness of various approaches and tools for the detection of feigning, including symptom self-report scales, personality inventories, cognitive tests used in routine neuropsychological assessment as well as tests that were specifically designed for detecting feigned cognitive dysfunction (so-called symptom validity tests, SVT) [15]. Most applied tools base their strategies for the detection of feigning on a few principles which are comprehensively described by Rogers' work on the clinical assessment of malingering [15]. For example, cognitive tests often take the *magnitude of errors* and *learning principles* into consideration. This means that genuine patients may have problems in some domains but not all, and that compliant test takers do usually show a predictable pattern of responses (e.g. they do better in easier tests and trials than in more difficult ones). Those who malingering, however, are often not aware of these effects, tend to perform poorly on all cognitive domains on which they are assessed and do often violate learning effects (e.g. poor performance on both easy AND difficult trials). When using clinical interviews and symptom rating scales, it is often focused on the endorsement of *rare and improbable complaints* (complaints which are known to be very infrequently described by genuine patients). It is also often examined whether individuals report the *combination of symptoms* which are commonly reported per se by genuine patients, but which are known to rarely occur in combination. Furthermore, the *intensity and frequency* of complaints is a useful source of information as malingerers tend to grossly exaggerate the frequency and severity of symptoms compared to what is usually seen in genuine patients.

Research on the development of detection methods for feigned sleep disorders may benefit from the knowledge gathered and advances made in the field of malingering detection as described above [15] in order to achieve high accuracy in malingering detection. Such methods may focus on core characteristics of sleep disorders and their consequences, such as multiple awakenings during the night or untimely awakening in the morning. Problems of daily life arising from sleep disorders, including cognitive dysfunctions, daytime sleepiness or feelings of depression may also be promising for the assessment of feigned sleep disorders. Various approaches and tools can be considered for the assessment, such as symptom self-reports scales, clinical interviews, or neuropsychological tests. A cognitive assessment should consider a broad range of functions as genuine patients with insomnia were found to have impairments in several cognitive domains (i.e. mild to moderate impairments in episodic memory, problem solving, or working memory) [16]. Furthermore, it might also be useful to assess symptoms which are less commonly known to be associated with sleep disorders among the general public, such as hallucinations, as these symptoms might be more difficult to feign because of their rather uncommon association with disturbed sleeping in the general public. Hallucinations, in fact, were reported to may occur in association with sleep disorders, mainly in the late night or early morning hours [17].

In conclusion, the prescription of benzodiazepines may represent a viable incentive for individuals to feign sleep disorders such as insomnia. Since the diagnostic process of sleep disorders is largely based on patients' self-reports, and because symptoms of sleep disorders are commonly known among the general public, many individuals might easily be able to feign sleep disorders without extensive periods of preparation. The vast negative consequences of undetected feigning, including health risks and financial costs, emphasize the need for paying more attention to this issue and for conducting research on the development and use of appropriate detection methods. This research can benefit from long-lasting and elaborate investigations on feigned cognitive dysfunctions performed in the context of TBI, PTSD or ADHD.

## REFERENCES

1. Halligan PW, Bass C. Malingering and illness deception. 1st ed. Oxford: Oxford University Press; 2003.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: American Psychiatric Press; 2013.
3. Bender SD. Malingered Traumatic Brain Injury. In: Rogers R, editor. Clinical Assessment of Malingering and Deception New York, NY: The Guilford Press; 2008. 69-86.
4. Kozaric-Kovacic D, Borovecki A. Malingering PTSD. In: Corales TA, editor. Focus on Posttraumatic Stress Disorder Research Hauppauge, NY: Nova Science Publishers; 2005. p. 202-279.
5. Tucha L, Fuermaier ABM, Koerts J, Groen Y, Thome J. Detection of feigned attention deficit hyperactivity disorder. Journal of neural transmission. 2014.
6. Musso MW, Gouvier WD. "Why is this so hard?" A review of detection of malingered ADHD in college students. J Atten Disord.2014; 18:186-201.

7. Harrison AG. Adults faking ADHD: You must be kidding. The ADHD report 2006; 14:1-7.
8. Pagel JF, Parnes BL. Medications for the Treatment of Sleep Disorders: An Overview. Prim Care Companion J Clin Psychiatry. 2001; 3:118-125.
9. Passarella S, Duong M-. Diagnosis and treatment of insomnia. American Journal of Health-System Pharmacy? 2008; 65:927-934.
10. Olkkola KT, Ahonen J. Midazolam and other benzodiazepines. Handb Exp Pharmacol. 2008; 335-360.
11. Khong E, Sim MG, Hulse G. Benzodiazepine dependence. Aust Fam Physician. 2004; 33: 923-926.
12. Busto U, Sellers EM, Naranjo CA, Cappell HD, Sanchez-Craig M, Simpkins J. Patterns of benzodiazepine abuse and dependence. Br J Addict. 1986; 81: 87-94.
13. Miller NS, Gold MS. Benzodiazepines: a major problem. Introduction. J Subst Abuse Treat. 1991; 8: 3-7.
14. Bornemann MA, Mahowald MW, Schenck CH. Parasomnias: clinical features and forensic implications. Chest. 2006; 130: 605-610.
15. Rogers R. Clinical assessment of malingering and deception. 3rd ed. New York: Guilford; 2008.
16. Fortier-Brochu E, Beaulieu-Bonneau S, Ivers H, Morin CM. Insomnia and daytime cognitive performance: a meta-analysis. Sleep Med Rev. 2012; 16: 83-94.
17. Babkoff H, Sing HC, Thorne DR, Genser SG, Hegge FW. Perceptual distortions and hallucinations reported during the course of sleep deprivation. Percept Mot Skills. 1989; 68: 787-798.

#### Cite this article

Fuermaier ABM, T Lucha, Becke M, Tucha O (2014) Feigning Sleep Disorders – a Call for Research and Clinical Consideration. J Sleep Med Disord 1(2): 1008.